

What is claimed is:

1. A liquid crystal display element configured by holding a liquid crystal layer between a pair of  
5 substrates arranged to face to each other, wherein:  
a twisted nematic type liquid crystal material used in said liquid crystal layer satisfies dielectric constant anisotropy  $\Delta\epsilon$  of  $0 < \Delta\epsilon < 8$  and twist elasticity modulus  $K_{22}$  of  $K_{22} > 6.0$  pN when the  
10 refractive index anisotropy  $\Delta n$  is  $0.16 \leq \Delta n \leq 0.18$ .

2. A liquid crystal display element configured by holding a liquid crystal layer between a pair of  
substrates arranged to face to each other, wherein:  
15 a twisted nematic type liquid crystal material used in said liquid crystal layer satisfies dielectric constant anisotropy  $\Delta\epsilon$  of  $0 < \Delta\epsilon < 13$  and twist elasticity modulus  $K_{22}$  of  $K_{22} > 3.0$  pN when the refractive index anisotropy  $\Delta n$  is  $0.18 \leq \Delta n \leq 0.20$ .

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3. A liquid crystal display element as set forth in claim 1, wherein a range of a cell gap  $d$  indicating a distance between said substrates of said liquid crystal display element is  $2.0 \mu\text{m} \leq d \leq 3.0 \mu\text{m}$ .

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4. A liquid crystal display element as set forth in claim 2, wherein a range of a cell gap  $d$  indicating a distance between said substrates of said liquid crystal display element is  $2.0\text{ }\mu\text{m} \leq d \leq 3.0\text{ }\mu\text{m}$ .

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5. A liquid crystal display element as set forth in claim 1, wherein a range of a pixel size of a pixel of said liquid crystal display element is  $18\text{ }\mu\text{m}$  or less.

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6. A liquid crystal display element as set forth in claim 2, wherein a range of a pixel size of a pixel of said liquid crystal display element is  $18\text{ }\mu\text{m}$  or less.

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7. A projection type display device comprising:  
a light source;  
a light convergence optical system for guiding a light emitted from said light source to a liquid crystal display element; and

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a projection optical system for enlarging and projecting a light subjected to light modulation by said liquid crystal display element;

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wherein said liquid crystal display element is configured by holding a liquid crystal layer between a pair of substrates arranged to face to each other, and  
a twisted nematic type liquid crystal

material used in said liquid crystal layer satisfies dielectric constant anisotropy  $\Delta\epsilon$  of  $0 < \Delta\epsilon < 8$  and twist elasticity modulus  $K_{22}$  of  $K_{22} > 6.0$  pN when the refractive index anisotropy  $\Delta n$  is  $0.16 \leq \Delta n \leq 0.18$ .

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8. A projection type display device comprising:

a light source;

a light convergence optical system for guiding a light emitted from said light source to a

10 liquid crystal display element; and

a projection optical system for enlarging and projecting a light subjected to light modulation by said liquid crystal display element;

wherein said liquid crystal display element  
15 is configured by holding a liquid crystal layer between a pair of substrates arranged to face to each other, and

a twisted nematic type liquid crystal  
material used in said liquid crystal layer satisfies dielectric constant anisotropy  $\Delta\epsilon$  of  $0 < \Delta\epsilon < 13$  and  
20 twist elasticity modulus  $K_{22}$  of  $K_{22} > 3.0$  pN when the refractive index anisotropy  $\Delta n$  is  $0.18 \leq \Delta n \leq 0.20$ .